

several intermediate wheel sets to the rotor of the motor which is fastened behind disc 28 and which is controlled in a well known manner by an electronic circuit comprising a quartz oscillator, a frequency divider and a pulse forming circuit in order to produce and apply to the motor winding, motor driving pulses in response to the pulses provided by the divider.

As in the case of the motor, the control circuit has not been shown on FIG. 2.

In fact this figure shows only a portion of the last intermediate wheel set 102 which is mounted behind disc 28 and the pinion of which meshes with the minutes wheel 98.

The minutes pinion 96 itself is coupled to the hours wheel 80 via a wheel set of the motion work 104.

This wheel set of the motion work 104 which may be formed for instance of plastic material comprises a hollow central tube 106, a motion work wheel 108 which meshes with the minutes pinion 96 and a motion work pinion 110 which is engaged with the hours wheel 80.

On the other hand, shaft 106 may pivot at one of its ends around a pivot 112 located at the end of a riser 114 and provided behind disc 28 and at its other end at the interior of a protuberance 116 taking the form of a hollow cylinder and of a hole 118 in plate 12 which brings about communication of the interior of this protuberance 116 with that of protuberance 56 provided on the other side.

In order to provide hour setting the clock likewise comprises a knob 120 which is located behind its case.

This setting knob 120 comprises a single piece in plastic material with a time setting stem 122 which passes to the interior of protuberance 56 and which terminates in a joining piece 124 of smaller diameter which is engaged on the interior of tube 106 of the motion work wheel set 104.

Furthermore, in order to be at the same time rigid in rotation with wheel set 104 and capable of disassembly, this stem 122 exhibits beyond the joining portion 124 two diametrically opposite flattened portions which engage in two corresponding axial notches of tube 106.

The latter is not visible on FIG. 2.

On the other hand, this figure shows very schematically the realization of the electric alarm circuit which is formed in part of metallic plates 66 and 88 with their contacts 68 and 90.

This circuit comprises two sweeps, for instance two metallic blades 126 and 128 which are each in contact with the back surface of one of the plates 66 and 88 and which rub against these plates when they are rotated.

One of these sweeps 126 is directly connected to the negative pole of the energization source 130 of the clock. The other sweep 128 is coupled to the positive terminal of this source via a switch 132 the opening and closing of which may be controlled by means of a knob 138 placed above the clock and which may be seen on FIG. 1 and of a control circuit 134 for a buzzer 136.

Finally, as is also shown on FIG. 1, glass 16 of the clock bears at its periphery an index more precisely a black or coloured arrow 140 which is glued or painted on the internal surface and which is located entirely or principally above a zone of the dial 40 which surrounds its graduations in order to avoid masking certain of the latter.

According to what was mentioned at the beginning, it is clear that this arrow on the glass may be replaced by a small element fastened in an adequate manner to the internal wall 24 of the bezel.

In one or the other of these cases, when one turns the bezel and the glass in order to bring the index into the position where it indicates the alarm time as chosen, there will be displaced at the same time disc 60 and contact 68 of the metallic plate 66 to a position which corresponds to that of the index.

Thereafter, as soon as the contact 90 of plate 88 touches contact 68 at the time indicated by the index, the control circuit 134 controls the buzzer 136 and the latter will emit an audible signal, it being nevertheless well understood that knob 138 has been raised and switch 132 closed. If such is not the case, nothing will happen.

When buzzer 136 emits a signal, it is possible to interrupt it in pressing on button 138 and thus opening switch 132 or to wait until circuit 134 at the end of a predetermined time itself terminates the audible signal.

What I claim is:

1. An alarm timepiece comprising:

support means;

a dial borne by said support means;

a shaft rotatably mounted on said support means;

a going train operatively mounted on said support means and comprising a plurality of wheels including an hour wheel and a minute wheel, said hour wheel and said minute wheel being rotatably mounted around said shaft;

an hours hand and a minutes hand coupled to said hour wheel and said minute wheel, respectively, so as to cooperate with said dial to display time;

a first contact point rigid with one of said wheels of said going train;

a member fixed to said shaft for rotation therewith;

a second contact point coupled to said member;

manual control means operatively coupled to said member for setting the position of said member and said second contact point, said position being representative of the alarm time at which an alarm must be triggered;

an index coupled to said manual control means for displaying said alarm time; and,

alarm-producing means for producing an alarm when the positions of said first and second contact points coincide with one another by virtue of rotational movement of said one of said wheels with respect to said member.

2. An alarm timepiece as claimed in claim 1 wherein said member and said hour wheel are adjacent one another and have faces facing one another, and wherein said first and second contact points are borne by said member and said hour wheel on said faces.

3. An alarm timepiece as claimed in claim 2 wherein said member and said hour wheel are formed of insulating material; and two conductive plates fixed to said faces, said contact points comprising projections from said plates.

4. An alarm timepiece as claimed in claim 3 wherein said projections comprise elastic tongues struck out from said plates.

5. An alarm timepiece as claimed in claim 1 wherein said manual control means comprises a rotatable bezel mounted on said support means, on the side of said dial, and a glass fixed to said bezel and coupled to one end of said shaft.

6. An alarm timepiece as claimed in claim 5 wherein said glass and said end of said shaft are coupled by means of an annular collar formed on the inside of said